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ABSTRACT

The Research on the Improvement Process (RIP) Program of the Research and Development Center for Teacher Education has made the investigation of the change process in high schools their primary research priority for the 1980s. In this paper, the high school research endeavors of the RIP program are described, with special attention being given to the design and methodology developed for the study. The research methods included exploratory visits, selecting and negotiating for study sites, scheduling interviews with the school staff, and analyzing taped interview data. In addition, some of the "madness" encountered by the research staff while engaged in the study is related. The paper concludes with what has been learned about how to conduct research in high schools. (BW)

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COLLECTING DATA IN HIGH SCHOOLS:

METHODS AND MADNESS

Leslie Huling-Austin

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Research and Development Center for Teacher Education
The University of Texas at Austin

R&D Report No. 3183

Paper presented at the annual meeting of the
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1984

COLLECTING DATA IN HIGH SCHOOLS: METHODS AND MADNESS[1,2]

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Why Study High Schools

Dissatisfaction with high schools on the part of both the public and the education community has increased in recent years, and demands for school improvement at the high school level are made more and more frequently. There is increasing need for practical knowledge that can be used to facilitate change and bring about improvement in the secondary school. The demand for high school improvement is currently demonstrated by numerous national commissions which have recently issued reports addressing the problems in high schools. Among these national reports are included:

A Nation At Risk: The Imperative for Educational Reform
(National Commission on Excellence in Education, 1983)

Action for Excellence
(Education Commission of the States, 1983)

Academic Preparation for College: What Students Need to Know and Be Able To Do
(College Board Equity Project, 1983)

Making the Grade: Report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy
(Twentieth Century Fund, 1983)

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[1]Paper presented at the annual meeting of the American Educational Research Association, New Orleans, April 1984.

[2]The research described herein was conducted under contract with the National Institute of Education. The opinions expressed are those of the authors and do not necessarily reflect the position or policy of the National Institute of Education. No endorsement by the National Institute of Education should be inferred.

Education and Economic Progress: Toward a National Education Policy (Carnegie Corporation, 1983)

Horace's Compromise: The Dilemma of the American High School (Sizer, 1984)

High School: A report on Secondary Education in America (Boyer, 1983)

Educating Americans for the 21st Century (National Science Board Commission on Precollege Education in Mathematics, Science and Technology, 1983)

Persons concerned about educational improvement in high schools are in need of practical assistance. Yet, the majority of school improvement and school effectiveness research has been conducted in elementary schools (Purkey & Smith, 1983; Goode, 1983). Much progress has been made in understanding how change occurs at that level (Hall et al., 1983; Crandall et al., 1982; Loucks & Hall, 1979; Hall, Hord & Griffin, 1980). However, relatively little research has been conducted at the high school level and the high school is sufficiently different from the elementary school so as to prevent a direct application into the high school setting of what has been learned about change in elementary schools. Among the factors that make the high school different from the elementary school are the size of the school, the organization of the faculty (high school teachers are typically organized into academic departments and are much more specialized than their elementary counterparts) and the division of administrative responsibility among several school administrators and department heads. High schools are different from elementary schools in that the academic department rather than the school as a whole is frequently the target of change in school improvement efforts. The curriculum in high schools is also more complex as a result of the athletic program, the vocational program, and the co-curricular program, just to name a few.

It appears from our initial research in high schools that the management of change in high schools also is quite different from what occurs in elementary schools. This initial work confirms what secondary principals and others have been saying for years: The high school is indeed "a horse of a different color." The high school is without question an extremely complex organization. In fact, it has been suggested that the high school is among the best known and the least understood public institution in America (Byrne, Hines & McCleary, 1978). For these reasons the staff on the Research on the Improvement Process (RIP) Program of the Research and Development Center for Teacher Education has made the investigation of the change process in high schools their primary research priority for the 1980's. In this paper, the high school research endeavors of the RIP program will be described, with special attention being given to the design and methodology developed for the study. In addition, some of the "madness" encountered by the research staff while engaged in the study will be related. The paper concludes with what has been learned about how to conduct research in high schools.

Getting Ready--Phase I Exploratory Visits

As part of the preparation for the 1983-84 High School Study the RIP program staff conducted an initial exploratory effort which consisted of a series of semi-structured visits to high schools during the 1982-83 school year. One or more staff members visited 12 high schools in various states including Texas, Oregon, Maryland, Indiana, New York and Florida. The purpose of these exploratory visits was to become more familiar with the organizational structure of high schools and the school improvement efforts taking place and to examine possible sources of information and strategies for data collection. In each visit, school administrators, department chairpersons, teachers and students were interviewed to gain their insight

related to how change occurs in high schools, the significant innovations that were present in high schools, and how to best conduct research on change in high schools. Special attention was devoted to understanding the role and function of department chairpersons in school improvement efforts. In each succeeding exploratory visit, the interview questions were further refined. Following each visit, a report of the findings from the visit was compiled by project staff and the total research staff debriefed their colleagues about their experience and perceptions.

The exploratory visits were tremendously helpful to project staff in planning for Phase II of the study. It became clear that the next phase of study needed to be a descriptive investigation of a national sample of high schools. It was also determined that the best data collection methodology was tape recorded interviews with a wide variety of sources including the principal, assistant principal for instruction, department heads, teachers, students, counselors, the student activities director, the athletic and music director, the school secretary, and various Central Office personnel. The interview data would also be supplemented by both school and district demographic information, and other information and documents provided by the districts.

The initial visits also pointed out the need for researchers to collect data in pairs, so that they could provide two viewpoints on the school and serve as a cross-check of each other's impressions of the school and the changes taking place. Two day data collection visits to the school were determined to be the most productive for the study. It appeared that one-day visits were not long enough as the first day debriefing clarified the areas in which additional information was needed that could be collected on the second day. Also, the amount of additional information gathered after two days did not appear to be worth the added expense.

Design and Organization of Phase II

Study Questions and Study Design

In the summer of 1983 plans were finalized for Phase II of the study and negotiations were begun for study sites. Throughout a series of staff meetings, major study questions and supporting subquestions were revised and formalized and are shown in Figure 1. These questions focus on the types, sources and purposes of changes that are presently taking place in high schools, the units (individual, department, schoolwide, districtwide, other) involved in change, the influence of various situational factors on change, and how change is managed in high schools.

The staff considered a number of factors in the design of the study. It was believed that it would be important to look at different kinds of schools in terms of size and community type and at schools with varying change dynamics. After numerous discussions, it was decided that the sample should be comprised of both schools that were considered to have a large amount of change taking place and schools that were considered to be typical for their district. The community types included were rural, urban, suburban and mid-size cities. High school size also varied with the nature of the community type. The final design included two high schools per site with 9 sites in 9 states geographically dispersed across the United States. Figure 2 is a graphic display of the study design. The two schools within a site were selected by the Central Office person(s) who served as our district contact. One school chosen was that judged by the district to be the most changing in the district, while the other was a school that was more typical of high schools in the district. There were two exceptions to this procedure. One was the rural site which by necessity was comprised of two single-high school districts. In this case, the area contact person selected the two high

Figure 1

Research Questions for High School Study

Major Study Question: How does change occur in high school settings?

1. What are the types, sources, and purposes of changes in high schools?

A. What kinds and sizes of changes have been implemented recently?

B. Within each school, how many changes are underway at this time (1983-84 school year)?

C. What were the reasons for the changes?

D. Were changes developed more frequently by internal or external sources?

E. Who was the impetus for implementing change?

2. What are the key units of change?

A. Under what conditions do schoolwide changes occur?

B. To what extent does the academic department function as a unit of change?

C. Under what conditions do schoolwide changes occur?

D. What other groupings are involved in change, e.g. grade levels, subgroups of teachers, etc?

3. What are the key situational factors that influence the change process?

A. In what ways does the co-curriculum affect change?

B. How do community values and other contextual factors influence the improvement process in high schools?

C. In what ways do students influence the change process?

D. What are the effects of external agencies on high school change?

4. How is the change process managed in high schools?

A. What do school administrators do to facilitate change?

B. What do department heads do?

C. How does the individual teacher affect and respond to improvement efforts?

D. Are there significant others involved in managing change? If so, who are they and what do they do?

E. What are some of the different configurations of leadership for change?

F. How is change planned for and monitored?

Figure 2

HIGH SCHOOL STUDY DESIGN

GEOGRAPHIC DISPERSION

DESIGN

Sites	Type of District	
2	■ Urban	Pennsylvania Texas
3	● Suburban	Georgia Connecticut Arizona
3	○ Mid-size City	Iowa California Oregon
1	★ Rural	Kansas

-- 2 schools selected at each site, one changing, the other a typical school for the district.

N = 9 sites, 18 schools, 72 researcher days of data collection.

schools, one which was perceived to be a changing high school and the other that was perceived to be typical for the area. The other exception was a district in which the Central Office procedures required that schools be allowed to volunteer to participate. After the visit, researchers were able to reach consensus on which school was the more changing of the two.

Structuring the Data Collection Methodology

A set of twelve role-specific interviews were developed by the research staff for use in Phase II. A set of interview questions were formulated around each of the study questions. Because it was not feasible to interview each person using all questions which were derived for the study, subsets of the questions were incorporated into multiple interviews so as to provide a range of persons answering each set of questions and to have each set cross-verified by several interviewees. Figure 3 is a summary of the roles of interviewees and the types of questions addressed to each. A sample of the interview questions used in the study are shown in Appendix A.

In addition, demographic data were collected on each high school and each district. A sample Demographic form is included in Appendix B.

Negotiating for Sites

Negotiations for each of the nine sites were handled slightly differently. In each case, one member of the research staff served as the

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[3]The CBAM Training Cadre is a group of approximately 30 individuals from across the U.S. and other countries who have received extensive training in the Concerns-Based Adoption Model and use the concepts and measures in their own work. Included in the Cadre are school-based curriculum consultants, staff developers, evaluators, intermediate service agency facilitators, state department consultants and facilitators, and higher education professors. The CBAM Cadre assists in the work of the RIP program by conducting workshops that have been developed out of RIP research and by advising RIP project staff in matters related to both training and research.

Figure 3

Study Questions	1. Types Sources Purposes	Interventions	2. Key Units	3. Situational Factors Influencing	4. Management of Change Process	General Background and Self Characterization
Principal	X	X	X	X	X	X
AP for Instruction	X	X		X	X	X
Dept. Head	X	X	X	X	X	
Teacher 1	X	X	X		X	
Teacher 2	X	X		X		
Students	⅓X			X		X
Counselor	X	X		X		X
Student Activity Director	X	X		X		
Athletic Director	X	X		X	X	
Music Director	X	X		X	X	
Curr. Coord.	X	X	X		X	
Central Office Secondary Ed. Adm.	X	X			X	X

primary coordinator for the site. In several areas of the country CBAM Cadre[3] members worked to help link the project with area school district personnel.

Once the site coordinator had made telephone contact with a prospective district, an explanatory letter was sent to the district contact person outlining the study and answering various questions participants were likely to have. The staff member coordinating the site would then follow-up with one or more telephone calls to the local contact person to talk about the district's participation in the study. In some instances it was necessary to get formal approval from the district's Central Office administration or School Board, while in other districts this was not necessary. Once the district had agreed to participate and the two high schools were chosen based upon the criteria for changing and typical, the staff coordinator contacted each study school principal by telephone to talk with them about their school's participation in the study. This conversation was followed up with a packet of information which included an explanatory letter to the principal along with a list of persons we wished to interview during the two-day visit, a sample interview schedule (see Appendix C) and a blank interview scheduling grid. In addition, a set of study participant letters was included to be given to each person to be interviewed during the visit. This letter explained the study and included on the back of it a set of focusing questions that participants could make notes about and bring with them to the interview. The staff coordinator then again telephoned the principal several days prior to the visit to answer any questions that had arisen and to offer assistance in organizing the schedule, if needed. The project offered to pay for revolving substitute teachers to cover classes while teachers and department heads were being interviewed. Interestingly, all of the schools declined the offer for the substitute teachers and organized the schedule around teachers' conference periods.

Preparing Data Collectors for the Visit

The site coordinator from the project staff assumed primary responsibility for preparing and organizing the data collection team for the site. The team consisted of the coordinator and three other data collectors. Because of the small number of project staff and the other responsibilities and obligations of the staff, additional data collectors who were not a part of the regular staff were utilized. In most instances, at least two regular staff members supplemented by CBAM Cadre members comprised the data collection team. In all but one case, it was possible to assign a regular staff member to each study school. (The exception was one school to which a Cadre member and a former regular staff member were assigned.) Cadre members who collected data in the study received "coaching" from the site coordinator prior to the visit along with the interview questions and tapes of sample interviews. Each data collector was supplied with a pre-visit packet which included copies of all the correspondence with the site, a complete set of questions to use in the interviews, the interview schedule (if supplied by the school prior to the visit), a set of the school and district demographic forms to be completed during the visit, and a set of data reduction forms to be used in the write-up after the visit. In addition, each pair of data collectors assigned to a school were given tape recorders and 36 hours of cassette recording tape.

Going to the Field--The Sites and What Was Encountered

In every school visited researchers were treated cordially and the principal and school staff were friendly and helpful. In several of the schools the principal and sometimes other administrators and staff appeared to have some anxiety about why they were chosen to participate. This anxiety seemed to subside quickly once the school personnel had the opportunity to

visit with the researchers and ask any questions they had about the study and their role in it. The warm reception given in the high schools is perhaps a study finding itself--contrary to popular opinion, high schools are not cold, hostile places for doing research. In fact, the opposite appears to be true--if approached properly, high school personnel are open to researchers and even welcome the opportunity to discuss their work and how they see their world.

Districts and Schools in the Sample

By design, the sample of schools visited was very diverse. Included were schools in small, rural districts, in very affluent suburban districts and in inner-city urban districts. District enrollments ranged from approximately 1,000 to 200,000; school enrollments ranged from 317 to 2,500. Per pupil expenditure varied from $2,064 to $4,682. The percentage of minority students in the schools visited ranged from 1% to 99% and the percentage of students continuing on to college varied from 22% to 80%. Included in the sample were schools facing rapid growth and schools struggling for survival because of declining enrollments. Principals involved in the study had between 2 and 26 years of experience and managed faculties ranging in size between 22 and 135. Several of the schools visited were housed in buildings more than 50 years old, others were located in new, modern facilities, and still others were housed in a variety of facilities in between. A summary of the demographics of the districts and the schools visited are shown in Figures 4 and 5, respectively.

Madness Encountered

The experiences of researchers in the study were anything but dull. The logistics and scheduling alone were often no small feats. Establishing a date

Figure 4

Demographics of Districts in The High School Study

	URBAN		SUBURBAN			MID-SIZE CITY			RURAL	
	PA	TX	AZ	GA	CT	CA	IA	OR	KS Site 1	KS Site 2
Population of Community	1,688,210	229,967	230,000	166,903	61,301	350,000	200,000	100,000	7,500	6,000
District Enrollment	202,469	64,357	14,882	41,460	7,567	23,608	30,981	17,500	1,104	1,231
Number of High Schools	31	8	10	9	2	8	6	4	1	1
% of Minorities Represented in District	74	90	15	4	12	10	15	7	5	2
Per Pupil Expenditure 1981-1982 (in $)	2,598	2,051	2,064	1,871	4,682	2,664	2,937	3,200	2,437	2,410
Average Teacher Turnover Rate (%)	0*	8	6	15	2	6	5	6	10	5
Number of Years Superintendent Has Been in Position	1	3	1	7	4	4	3	2	13	11
Number of Central Office Administration Staff	551	60	32	35	61	14	108	25	1	2

* district faced with staff reductions

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Figure 5

Demographics of Schools in The High School Study

	URBAN				SUBURBAN						MID-SIZE CITY						RURAL	
	PA		TX		AZ		GA		CT		CA		IA		OH		KS	
	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T	C	T
Age of School Building	68	56	45	60	12	31	35	26	14	27	30	22	71	61	31	19	11	22
Enrollment	2500	1981	1700	1931	2037	1469	1805	738	1378	1335	1601	1455	2132	2272	1700	1340	317	375
Number of Fulltime Faculty Members	135	124	92	107	97	76	73	36	86	81	61	55	84	92	71	65	22	28
% of Minority Students	99	99	91	99	5	8	3	3	10	14	27	34	12	7	6	3	3	1
Annual Teacher Turnover Rate (%)	8	0*	3	9	10	3	10	8	6	5	10	2	3	5	10	7	10	2
Number of Years Principal Has Been at School	11	6	2	4	2	2	2	11	22	5	6	4	3	26	8	3	18	17
Principal Number of Years Experience as a Principal	11	6	5	6	2	8	9	12	22	11	10	5	7	26	18	6	21	17
Number of Other Administrators at School	2	2	3	3	3	3	4	2	3	2	3	3	3	3	3	3	0	0
% Students Continuing to Technical Training	5	7	30	10	5	1	10	10	2	16	5	1	4	2	2	5	15	35
% Students Continuing to College	35	22	30	30	65	60	55	40	81	67	80	60	41	50	80	60	50	50

(C = Changing School, T = Typical School for District)

* district is faced with staff reduction

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for the visit was often problematic since it needed to be convenient for both high schools and also be a data for which four data collectors were available. Once the visit was scheduled, coordinating the travel itineraries of the data collectors who were often coming from three different locales was quite a challenge. More than once, researchers were standing in airport lobbies or at rent-car reservation desks looking for colleagues wondering if they might have missed their connecting flights or had misunderstood the agreed upon meeting time and place. Needless to say, the airlines and the weather did not always cooperate, but in spite of it all the data collection was achieved with two researchers at each study school on the agreed upon dates. This is not to say, however, that data collection was uneventful.

For example, at one site, researchers were surprised to find that their visit coincided with the last day of the quarter and that teachers were frantically trying to figure and record grades using the new computerized system for the first time. Teachers were very kind to take time out of their busy schedules that day to be interviewed, but several asked the interviewer if she knew what they were supposed to do with their grade sheets when they were completed.

As mentioned earlier, the scheduling of visits was never simple. In one instance the site coordinator had established a date for the visit with the principal. In addition, they set up a meeting to work out the details of the visit. When she arrived, she was greeted by an assistant principal who asked "Where's the other interviewer?" Somewhere in the process, communication had broken down and the assistant principal had scheduled all of the interviews one week early.

And then there was the school were the principal was trying to avoid being interviewed by the researchers. He had successfully evaded both researchers on the first day of the visit. This made the researchers

even more determined to corral him on the second day. Every time one of the researchers would approach him the second day, he would "grab" the first random person who walked by even though they were not on the interview schedule and "shove" them toward the researcher saying "here, talk with Mr. Smith (or Mrs. Jones); he (she) can tell you a lot of interesting things about how change takes place here." Finally, one researcher was able to catch the principal in his office and went in and immediately began interviewing him. Shortly, the second researcher came along, shut the door on the way into the office and joined in on what turned out to be a very pleasant and informative interview with the principal.

Another principal had another strategy for dealing with his two researchers. It seems every time they turned around he was shoving food toward them--a doughnut here, a brownie there, nuts and fruit, and now off to lunch. He apparently believed that "the way to a researcher's heart is through his stomach."

On the more serious side, researchers in one school found themselves caught in a somewhat uncomfortable debriefing/counseling session. At the conclusion of the visit to each school, researchers debriefed with the principal about the visit and their impressions of change in the school. This particular principal needed someone to talk to about the stress and pressure he was under and wanted to use the session for that purpose. The principal was "caught between a rock and a hard place" in that there were strong district directives mandating change and he had a faculty that was quite resistant to change. The debriefing session became an exercise in dealing with the principal's concerns with researchers trying to give suggestions and be supportive without misrepresenting their impressions of how things really were.

At another site, researchers were at the school on an early dismissal day (again to their surprise). The interview schedule which called for eight 50-minute interviews in the day had been adjusted so that all eight were scheduled prior to the 1:30 p.m. dismissal time! When the 1:30 bell rang, the interviews were completed, but both researchers emerged looking a little bleary-eyed and a little worse for the wear.

Researchers in another site also got a little surprise. Without consulting the researchers, and giving them almost no advance notice, the principal had ordered a catered lunch brought into her large office area and had invited the other administrators and department heads in to have lunch and for the researchers to discuss their work in general, the high school study and their impressions of the school.

During one of the winter visits, it snowed 12 inches the day and evening before data collection was to begin. The local contact person informed researchers that school was likely to be cancelled the following day if the snow continued. Researchers resigned themselves to riding out the storm, but were pleased to wake to clear skies and a full day of data collection.

Working With the Data

Researchers in this study were faced with an extremely difficult task--how do you answer four study questions from a data base of approximately 450 audio-taped interviews? One thing they knew for sure--in order to stay on top of the task it would be necessary to reduce and analyze data throughout the study. Several strategies were employed to do this including debriefing sessions, write-up packets, a set of site and cumulative notebooks, and an analysis session with outside consultants who have expertise related to high schools.

Debriefing Sessions

Two rounds of debriefing occurred around each study visit, and each session was tape recorded for later use. At the end of Day 1 data collection, researchers debriefed the day and shared their impressions thus far of the schools and the change dynamics occurring there. Researchers used this session to reality-check their impressions against each other's and to pinpoint areas that needed additional investigation or clarification the following day. (Secretaries when transcribing the tapes have noted irregular background sounds and suggested that the debriefing environment appeared to have been poorly selected.)

The second round of debriefing was conducted back at the Center and involved the total research staff. Data collectors described the district and the schools and shared their impressions of what they had found. Staff members were then able to ask questions and offer their insights based upon what they heard and their own experiences in other sites. After each additional visit, the staff would collectively focus on what was emerging from the data and reflect on what was being learned from the study of high schools. When it was deemed useful, the debriefing tapes were taken by a staff member who made summary notes of the highlights of the tape. The notes from these tapes were then compiled into a debriefing notebook.

The Write Up Packets

Each researcher, after each visit, used the interview tapes and his/her notes to complete a four-part write-up packet that was designed to address the four basic study questions. Part I of the packet asked the researcher to document the recent changes or innovations taking place in the school and to indicate whether they were districtwide, schoolwide, departmental or individual changes. Using a set of codes devised for the study, the

researcher coded what type of change it was, and when possible, coded the impetus, initiator, developer and facilitator of the change. This part of the packet addressed Study Question 1, types, sources and purposes of changes and Study Question 2, units of change.

Part II of the packet asked the researcher to document what he or she perceived to be some of the critical interventions that had influenced the change process in this school. The interventions linked backed to the innovations in Part I of the packet. Using codes from the intervention anatomy (Hord, Hall & Zigarmi, 1980), the researcher coded the level (incident, tactic or strategy) and the source target and function of the intervention (Hord & Hall, 1982). This part of the packet was designed to help answer part of Study Question 4, how is change managed.

Situational factors influencing change, Study Question 3, were addressed in Part III of the write-up packet. In this section the researcher was asked to descriptively write about 9 various factors such as the facility, the community, the co-curriculum, the district and to reflect upon the role of these factors in influencing change.

The final section of the write-up packet asked the researcher to write a two page report on the leadership and management of change in the school including the influence of the principal's style and how the principal and other important leaders function in the school. This section, along with Part II, of the write-up packet, was designed to address Study Question 4 about the management of change in high schools.

Tape Logging and Site Cumulate Notebooks

The total data set for the study consists of approximately 450 audio-tapes, 36 independent write-ups from researchers, a set of district and school demographic forms, and any additional information provided by the

district or schools in the study. A system for logging and storing the tapes by school and site number was developed and used to keep track of the data in its original form.

Three copies of each write-up packet and demographic forms were made. The copies went into three notebook sets. One set of notebooks consisted of a site notebook for each district which contained the district and school demographic forms and the write-ups of the four data collectors who worked in the site.

Another set of cumulative notebooks was used to organize the demographic data and the data from the write-up packets into individual sections. All the demographic forms are together in one section of the notebook, as are all the changes identified in the study, and so forth. This cumulative notebook has been very helpful to researchers as they try to organize data to answer each specific study question. A second set of cumulative notebooks is kept at home by one of the researchers to assure that the data would not be lost in the event of a fire at the Center or some other type of catastrophe.

The additional data provided by the district and schools included items such as master schedules, maps of the district or school, student newspapers, etc. The items were compiled into file folders and were kept along with the notebook sets for further reference.

Analysis Session With Consultants

In the spring of 1984, with two sites still to visit, the research staff participated in a two-day analysis session with four outside consultants who have expertise related to high schools. Two of the consultants were from public school settings -- one was a principal from one of the high schools included in the study and the other was a Central Office curriculum coordinator. Also, included in the group was a state department of education

person who had also been a high school principal and a university professor who has a national reputation for his work related to high schools. In the two-day work session, staff members described the data gathered in the study and shared their initial findings and impressions. Consultants provided their input and feedback on the analyses thus far and worked with the staff to plan the further analysis of the data. In addition, the consultants made recommendations related to the next phase of the study of change in high schools. It is now anticipated that Phase III of the high school study will be an intensive year long investigation of change in a small number of selected high schools.

What Has Been Learned About Methodology For Doing Research in High Schools

When the research staff reflects back to the time before the first early exploratory visits to high schools it is clear that from their experiences a great deal has been learned about how to do research in high schools. It is now clear to the project staff that high school personnel are open to having researchers in their schools. From the early visits to high schools researchers determined that a methodology primarily built around role-specific structured interviews was best for gathering the type of data needed in this phase of the study.

It was learned that even when making arrangements locally, it was best to do as much as possible over the telephone. When researchers had appointments with school administrators, they sometimes found themselves waiting more than an hour to see a principal that was tied up taking care of unforeseen occurrences that required his immediate attention. This in itself is an indication of the unpredictability of a high school principal's workday.

After several visits, it was discovered that the teachers who brought notes with them to the interviews seemed to be more comfortable and more comprehensive in what they had to say. As a result of this observation, focusing questions were added to the back of the study participant letter and interviewees were encouraged to make notes and bring them to the interview.

The initial experiences interviewing students led researchers to discover that interviews with small groups of students were more productive than interviews with individual students. It was later found that a mixed group of both male and female students also seemed to help break the ice that was sometimes there when a group of all boys or all girls faced an interviewer of the opposite sex.

Researchers learned that the sooner they tackled the data write-up packet the better and that taking a fairly comprehensive set of notes during the interviews also helped during the data reduction. In addition, the note taking seemed to be something that teachers expected the researcher to do even though the tape recorder was running.

It was learned that, as a general rule, school secretaries are very protective of their principals and that one way to break the ice with secretaries is to get them to talk about their families. Researchers also got fairly good at being able to identify what kinds of teachers could give the best recommendations for good restaurants in the area.

During the past two years, a great deal has been learned by this project about "how" to do research in high schools; certainly not all there is to know, but certainly a substantial amount. As for "what" has been learned about high schools and how school improvement occurs at the secondary level, the reader is invited to read Hall et. al. (1984) and the following four papers in this symposium set to learn what insight has been gained from the preliminary analyses of this descriptive study of a national sample of high schools.

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Appendix A

Suzie & Leslie
3-1-84
Revision

Teacher 1 Interview Questions

1. Tell me about what you day is like as a _____ teacher.

2. Do you sponsor a student activity or have involvement with the co-curriculum?

3. How does your department function (if not already discussed)? What is the role of the department head?

4. Where do you go to get help with instructional matters?

5. How is the school as a whole organized? How do decisions get made? What is the chain of command?

6. Who has the most influence on what happens in this school?

7. (If not already covered) Specifically, what role does the principal play?

8. What role does the central office play?

9. What changes have you been involved in during the past two years? Probe each change mentioned to determine: (Probe for individual, unit, and school wide innovations they have been involved in)

   a. the purpose of the change
   b. The source of development of the change--internal or external, who
   c. Who initiated it
   d. who (what group) did it involve (unit of change)
   e. who is responsible for facilitating it
   f. Ask for examples of things that person did to facilitate (interventions) Probe for critical incidents
   g. was it monitored in any way

10. In general, what other changes do you know about in this school?

11. Do you see yourself more a part of the faculty as a whole, your department, or another group? Tell me about that group.

12. Is there anything else you can tell me about this school that would help me understand it better?

13. How often do you interact with the principal?

Leslie & Suzie
11/1/83
Revision

Assistant Principal for Instruction Interview Questions

1. Tell me something about the schools as a whole. How would you describe or characterize this school to other people? How would you describe the faculty and staff, community and students?

2. What is your role in the school?

3. How is that different from the principal?

4. Are there other on-site administrators? What do they do?

5. Do you work with department heads or teachers? In what ways?

6. Do you work with central office personnel? How and why?

7. Tell me about some specific changes that you have been involved with that have been implemented within the last 2 years? Probe for different units.

   Probe each change mentioned to determine (select at least 3 major ones):
   a. The purpose of the change
   b. the source of development of the change--internal or external, who
   c. who initiated it
   d. who (what group) did it involve (unit of change)
   e. who is responsible for facilitating it
   f. ask for examples of things that person did to facilitate--interventions. Probe for critical incidents
   g. was it monitored in any way

8. What is being emphasized or initiated in the school this year?

9. When you think about the change efforts that you are or have been involved in, what factors have a positive and negative influence on them? (Probe for whichever wasn't mentioned) What was your role?

   a. the co-curriculum
   b. the community
   c. the principal or central office
   d. other teachers
   e. professional organizations
   f. the students

   If no changes are mentioned, discuss influence of above factors in general.

10. Is there anything else you can tell me about this school that would help me understand it better?

Suzie & Leslie
11/1/83
Revision

Student Interview Questions

1. What are the strong points of this school? Where could it use some improvement?

2. What is being emphasized by teachers and administrators in the school this year? in other years?

3. Since you began here has the school gotten worse, better, stayed the same? Why do you think that?

4. Who has the most influence on what happens in the school (probe for different areas)? Why?

5. How does the co-curriculum affect the school? Probe athletic/music.

6. What effect do parents and others in the community have on what happens in the school? How?

7. How do students change things in the school?

8. What kind of changes have occurred in this school since you began here?

9. Is there anything else you can tell me about this school that would help me understand it better?

Department Head interveiw Questions

Suzie & Leslie
3-1-84
Revision

1. What do you do as a department head (probe each: monitor teachers, budget, staffing, curriculum)? How are you appointed? What compensation do you receive?

2. Do you sponsor a student activity or have an involvement with the co-curriculum?

3. How do you work with other department heads, your teachers, the principal, other on site administrators, curriculum coordinators, and central office personnel? How often do you interact with the principal?

4. Where do you go for help with instructional matters?

5. Do all department heads in the school function basically the same or is there a great deal of difference in how they operate?

6. Are all departments treated equally or are some favored more? Do all receive similar support? Which departments have more influence?

7. Who has the most overall influence on what happens in the school? How do decisions get made?

8. What changes have you and/or your department been involved in during the past two years? What specifically was your role? Probe different units. Probe each change mentioned to determine:

   a. the purpose for the change
   b. the source of development of the change--internal or external
   c. who initiated it
   d. who (what group) did it involve (unit of change)
   e. who is responsible for facilitating it
   f. ask for examples of things that person did to facilitate (interventions) Probe for critical incidents
   g. was it monitored in any way

9. Are there other units or groups in addition to those mentioned that are engaged in improvement efforts?

10. When you think about the change efforts that you are involved in, what factors have a positive and negative influence on them? (Ask for examples of each.) (Probe for whichever wasn't mentioned) What was your role?

    a. the co-curriculum
    b. the community
    c. the principal or central office
    d. other teachers
    e. professional organizations
    f. the students

    If no changes are mentioned, discuss influence of above factors in general

11. Is there anything else you can tell me about this school that would help me understand it better?

Appendix B

9/26/83

SCHOOL DEMOGRAPHICS SHEET
for
High School Study

Ask for copy of organizational chart.

GENERAL SCHOOL QUESTIONS

1. How old is the school building? _____

2. The school year operates on a: _____traditional 9-month calendar

   _____year-round calendar

3. How many teachers in the school are _____full-time?

   _____--part-time?

4. How many teachers are:

   _____regular classroom teachers _____"Specials" (list)_____

   _____

   _____other resource teachers _____other (please specify):_____

   _____

5. For the past several years, what has been the annual teacher turnover rate? _____

6. How many paid teacher aides work in the school? _____

7. Do volunteers work in the school? _____Yes _____No

8. How many office staff work in the school? _____full-time?

   _____--part time?

9. How often is a school newsletter/bulletin published?

   _____daily _____weekly _____monthly _____each semester

   _____only at the beginning for the year _____whenever needed

   _____never

10. How often are school-wide staff meetings held?

    _____daily _____weekly _____monthly _____each semester

    _____whenever needed

SCHOOL DEMOGRAPHICS SHEET for
High School Study
Page Two

11. How often are department meetings held?

_____weekly _____monthly _____each quarter or semester

_____whenever needed

12. Is there a Parent-Teacher Organization? _____Yes _____No

13. How often does it meet?

_____more than once a month _____once a month _____several times a year

_____once a year

14. What is the average attendance at PTO meetings?

_____75-100% of the parents _____50-74% of the parents

_____25-49% of the parents _____10-24% of the parents

_____only a handful

STUDENTS

15. How many students are currently enrolled in the school?_____

16. What is the average daily student absenteeism for this school? _____

17. What is the range of number of students per class assigned to a teacher?

_____

18. To what degree is student mobility a factor?

_____high mobility _____average mobility _____low mobility

19. Estimate the percentage of children in the school who come from families in each SES category; space is provided for further description, if necessary:

_____upper _____upper middle _____middle _____lower middle _____lower

20. What ethnic groups are represented in the school? (Give approximate percentages.)

_____White _____Black _____Hispanic _____Asian _____Other

(please list_____)

SCHOOL DEMOGRAPHICS SHEET for
High School Study
Page Three

21. Estimated percentage of the students that are not U.S. Citizens immigrants, legal or illegal aliens, refugees)?

_____

22. Indicate country of origin and approximate number of students from each category:

___ _____ ___ _____

___ _____ ___ _____

___ _____ ___ _____

23. Describe any special attention or activities devoted to this special clientele within the school:

24. What percentage of the students are eligible for bilingual education?___

25. What percentage of students continue their education beyond the high school level?

%_____to 4 year college

%_____to 2 year college

%_____technical training

26. How many merit, scholar finalists has the school had in 1982-83 _____,

81-82_____, 80-81_____?

ADMINISTRATORS

27. How many years has the principal been a principal? _____

28. How many years has she/he been principal at this school? _____

29. Are there any administrators other than the principal?

_____Yes _____No

30. If so, how may? _____ What are their roles? _____

_____

SCHOOL DEMOGRAPHICS SHEET for
High School Study
Page Four

BUDGETING

31. What is the average per pupil expenditure for the school for the

    1982-1983 school year? _____

32. Does a set percentage of Revenue generated by the athletic program get returned to the school? If so, what percent? _____%

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Appendix C

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10/14/83

Selection Criteria for School Personnel To Be Interviewed

The following lists the numbers and kinds of School Personnel we would like to interview in our study:

The Principal

The Assistant Principal in charge of Instruction

The Campus Administrator who has the most direct involvement with the co-curriculum (Student Activities Director)

4 Department Heads: two from the big four departments: Science, Math, English Social Studies
preferabley two departments that operate and function substantially different from each other

one from another large department such as Business
one from a small department

6-8+ teachers: one each from the departments whose department heads are included in the study (those described above)

two or more others randomly selected, some who have taught elsewhere

9+ students: We would like to interview students in small groups of 3 or more according to the following grouping: (these discussions could be half-period discussions if necessary or desirable)

one group: including the student newspaper editorial staff who would cover different departments on the newspaper

one group: including an outstanding musician, outstanding athelete, and outstanding scholar

one group: random selection of upperclassmen (average achievers who are not school "stars")

We would be interested in including some students who have attended other schools and who might be able to discuss differences between schools. We are not necessarily interested in talking to elected student officials (student council, etc.)

1 School Athletic Coordinator

1 Music or Band Director

1 Counselor

1 Senior Administrative Assistant (Head School Secretary)

Two perons from Central Office:
1 Curriculum Coordinator who works with your school, and
The Administrator of Secondary Education

We would also like to include a tour of the school as a part of the study visit.

We recognize that organizing this schedule represents a lot of coordination on the part of the school. The intent in talking to this diverse a group of people is to get as broad a picture of the school as possible. The focus of this study is on the process of change as it is occurring or has occurred in the past. We feel that different people within the school can reflect different parts of the process and different effects.

The following is a sample of a schedule for a high school having 8, 50-minute periods. The sample shows two researchers visiting the school for two days. This is only offered as an example. It is not intended to indicate that your staff should be scheduled in the same way.

		Day 1		Day 2	
		researcher 1	reseacher 2	reseacher 1	reseacher 2
period 1	8:00-8:50	both researchers meet with the Principal		Central ofc Secondary Ed Admin.	Assistant Principal Instruction
period 2	8:50-9:40	both continue with principal; tour school		Curriculum Coordinator	student group student group 25 min. each
period 3	9:40-10:30	Department Head	teacher	break student group 20 min.	Music Director/ Band
period 4	10:30-11:20	Athletic Director	Student Activities Director	teacher	teacher
period 5	11:20-12:10	open lunch	open lunch	counselor lunch	Department Head lunch
period 6	12:10-1:00	Department Head	teacher	teacher	teacher
period 7	1:00-1:50	teacher	Department Head	open	teacher
period 8	1:50-2:40	Head School Secretary	open	both researchers meet with the Principal for feedback	

The next page is a blank schedule form for you to use in planning time and personnel to be interviewed during the study visit.

BEST COPY AVAILABLE